6JV8

High-Mu Triode— Sharp-Cutoff Pentode

9-PIN MINIATURE TYPE

For Sound-IF, Keyed-AGC, Sync-Separator, Sync-Amplifier, Noise-Suppression Circuits, and Video Amplifier Service

GENERAL DATA

Electrical:

Heater Characteristics and Ratings:			
Voltage (AC or DC)	6.3[a]	6.3 ±0.6	volts
Current.	0.600 ±0.040	0.600[b]	amp
Warm-up time (Average) . .	11	–	sec
Peak heater-cathode voltage (Each unit):			
Heater negative with respect to cathode . .	200 max.		volts
Heater positive with respect to cathode . .	200[c] max.		volts

Direct Interelectrode Capacitances:[d]

Triode Unit:		
Grid to plate.	2.2	pf
Grid to cathode and heater	3.0	pf
Plate to cathode and heater	2.0	pf
Pentode Unit:		
Grid No.1 to plate . . .	0.08 max.	pf
Grid No.1 to cathode & grid No.3 & internal shield, grid No.2 and heater	8.0	pf
Pentode plate to pentode cathode & grid No.3 & internal shield, grid No.2 and heater .	3.2	pf
Pentode grid No.1 to triode plate	0.012 max.	pf
Pentode plate to triode plate	0.24 max.	pf

Characteristics, Class A$_1$ Amplifier:

	Triode Unit	
Plate Voltage.	200	volts
Grid-No.1 Voltage.	-2	volts
Amplification Factor	70	
Plate Resistance (Approx.) .	17500	ohms
Transconductance	4000	μmhos
Plate Current.	4	ma

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Triode Unit

Grid-No.1 Voltage (Approx.) for plate μa =20.	-5	volts

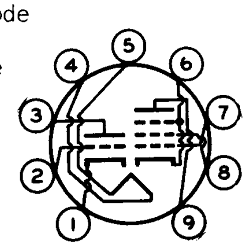
Pentode Unit

Plate Voltage	40	60	125	200	volts
Grid-No.2 Voltage	125	200	125	200	volts
Grid-No.1 Voltage	0	0	-1	-2.9	volts
Plate Resistance (Approx.)	-	-	100000	150000	ohms
Transconductance.	-	-	11500	10700	μmhos
Plate Current	28[e]	51[e]	22	22	ma
Grid-No.2 Current	9[e]	14[e]	4	4	ma
Grid-No.1 Voltage (Approx.) for plate μa =20. . . .	-	-	-5.5	-9	volts

Mechanical:

Operating Position. . . . . Any
Type of Cathodes. . . . . Coated Unipotential
Maximum Overall Length. . . . . 2-5/8"
Maximum Seated Length . . . . 2-3/8"
Length from Base Seat to Bulb Top (Excluding tip) . 2" ±3/32"
Diameter. 0.750" to 0.875"
Dimensional Outline . . . . See *General Section*
Bulb. T6-1/2
Base. . . . . .Small-Button Noval 9-Pin (JEDEC No.E9-1)
Basing Designation for BOTTOM VIEW. 9DX

Pin 1 -Triode Cathode
Pin 2 -Triode Grid
Pin 3 -Triode Plate
Pin 4 -Heater
Pin 5 -Heater
Pin 6 -Pentode Cathode, Grid No.3, Internal Shield



Pin 7 -Pentode Grid No.1
Pin 8 -Pentode Grid No.2
Pin 9 -Pentode Plate

AMPLIFIER —Class A₁

Maximum Ratings, *Design-Maximum Values:*

	Triode Unit	*Pentode Unit*	
PLATE VOLTAGE	330 max.	330 max.	volts
GRID-NO.2 (SCREEN-GRID) VOLTAGE	-	330 max.	volts
GRID-NO.1 (CONTROL-GRID) VOLTAGE:			
Negative-bias value	50 max.	50 max.	volts
Positive-bias value	0 max.	0 max.	volts
PLATE DISSIPATION	1.1 max.	4 max.	watts
GRID-NO.2 INPUT	-	1.7 max.	watts

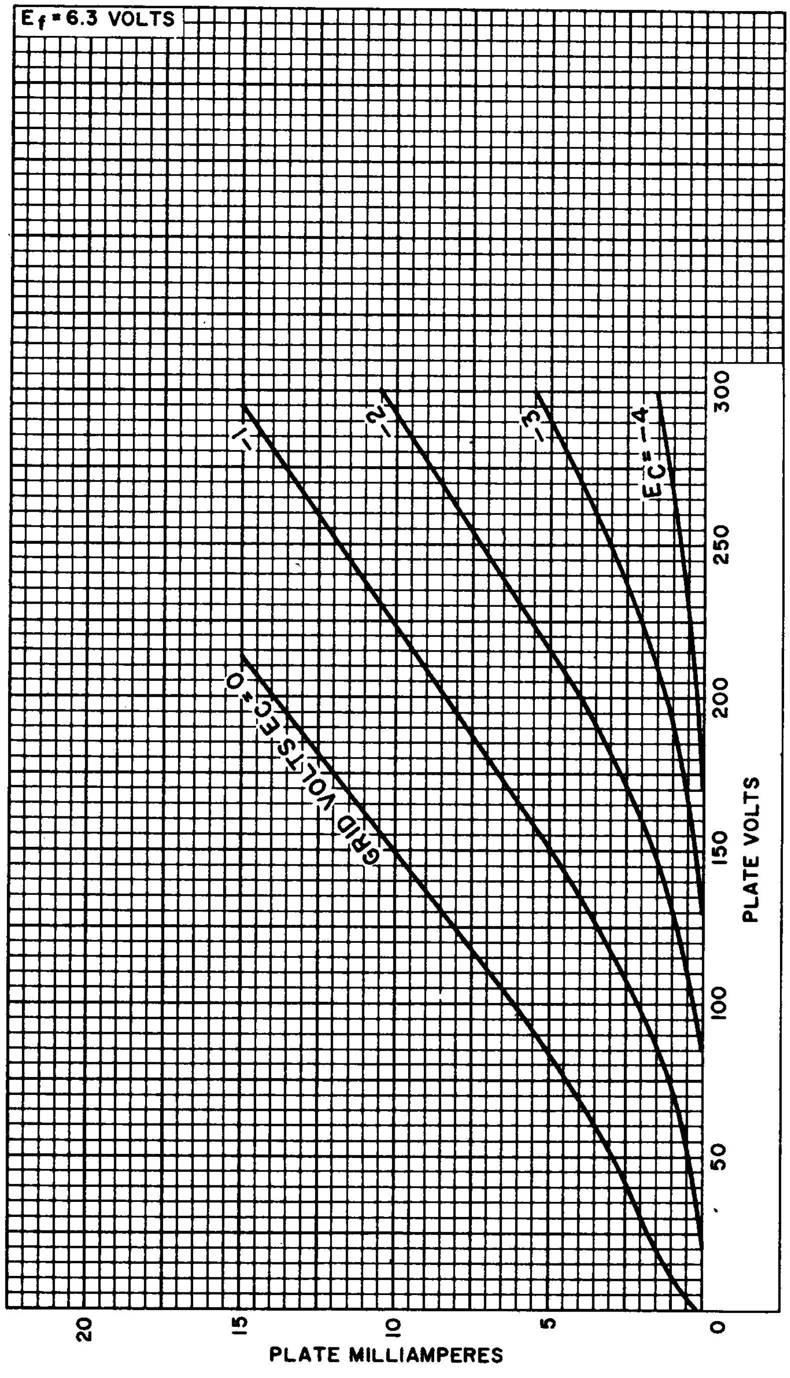
Maximum Circuit Values:

Grid-No.1 Circuit Resistance:			
For fixed-bias operation. . .	0.5 max.	0.25 max.	megohm
For cathode-bias operation	1 max.	1 max.	megohm

[a] At heater amperes = 0.600.
[b] At heater volts = 6.3.
[c] The dc component must not exceed 100 volts.
[d] Without external shield.
[e] This value can be measured by a method involving a recurrent waveform such that the maximum ratings of the tube will not be exceeded.

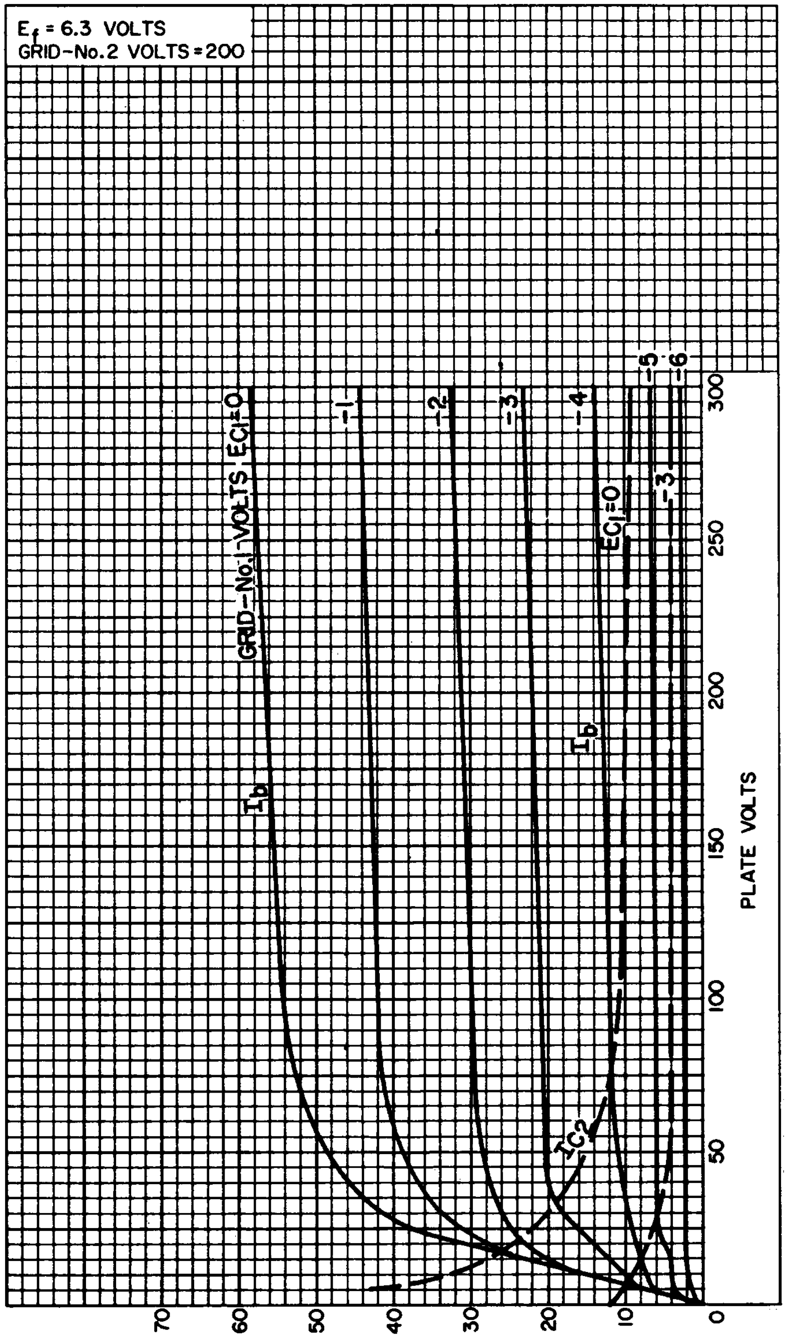
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AVERAGE PLATE CHARACTERISTICS
Triode Unit



92CM-11960

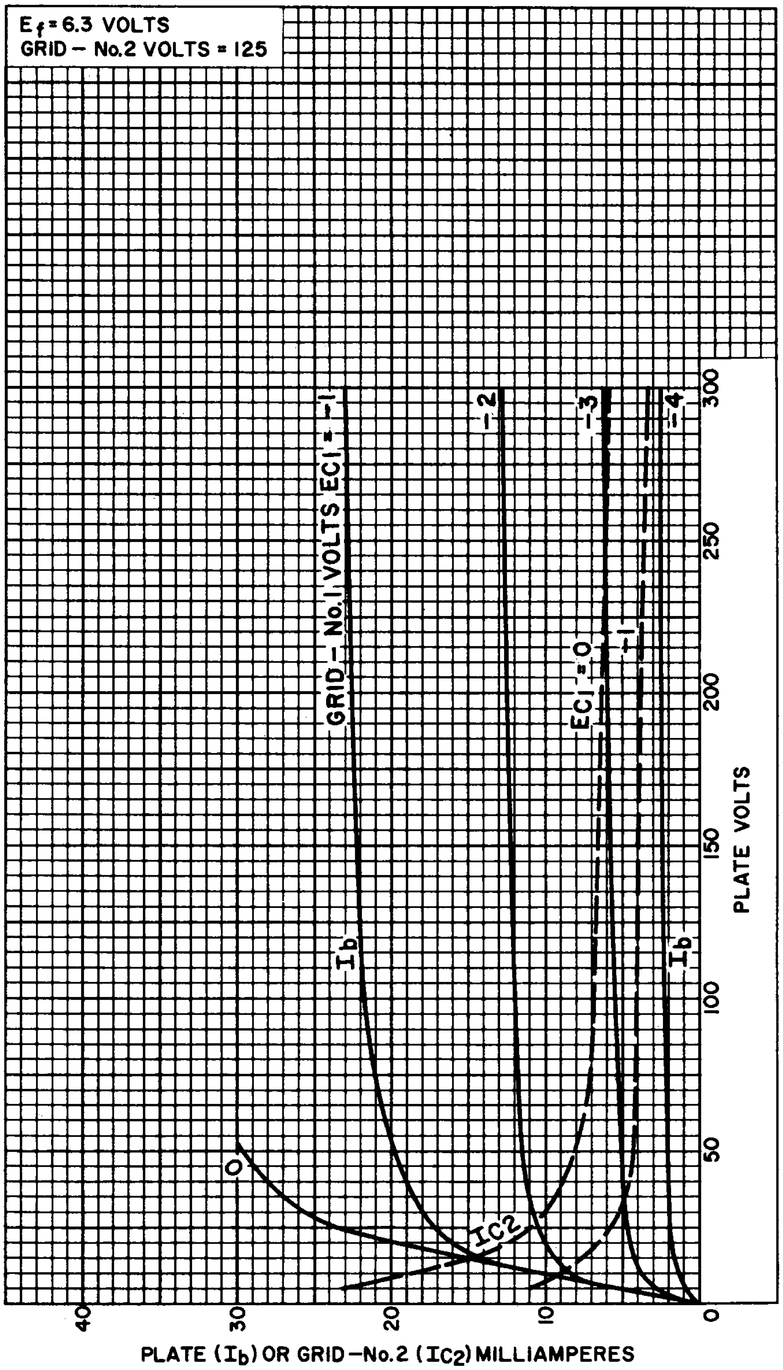
AVERAGE CHARACTERISTICS
Pentode Unit



92CM-11961

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AVERAGE CHARACTERISTICS
Pentode Unit



92CM – 11962